

1 **ABSTRACT OF THE INVENTION**

2

3 *sub A 17* A system and method is provided for learning data values over time as they are entered
4 by a user on a form such as a web page form. An Internet web browser can be modified to
5 suggest previously used data values for any form field that is the same as or similar to a
6 previously used form field. Application programs that use the web browser can gain access
7 to previously used form field values even if they have no knowledge of the field names.
8 Software in a web browser associates field names across different Universal Resource
9 Locators (URLs), so that when a user enters a value into a field (e.g., username) at a first web
10 site, that same value can be automatically suggested when the user displays a different form
11 on a different web site that uses the same field name. The more web sites that are visited by
12 the user, the more the software learns field values and is able to suggest likely choices for field
13 values. For security reasons, field values are preferably not stored in the application program
14 or on the target web site, but are instead stored locally on the client computer or at a trusted
15 web site known to the browser. Web sites can be prevented from surreptitiously discovering
16 suggested values because a user may be required to hit at least one keystroke before any data
17 values are suggested. Heuristics can be used to identify and suggest values for fields, and field
18 identifiers can be searched in a historical database, a user profile database, a common names
19 database, and mappings to the standard vCard schema.

20